

WHAT IS CLAIMED IS:

1. Video compression transmission apparatus for
compressing a digital video signal and transmitting the
5 resulting signal, comprising:

a video compression unit for performing compression
encoding on an input digital video signal;

10 a video transmission unit for transmitting to outside
the signal compression-encoded by the video compression unit
via a communication line; and

a controller for controlling the operation of the video
compression unit and the video transmission unit,

15 wherein the video compression unit and the video
transmission unit are operated in parallel.

2. Video compression transmission apparatus
according to claim 1,

20 wherein at least one of a compression encoding process
via the video compression unit and a transmission process via
the video transmission unit can be changed by the controller.

3. Video compression transmission apparatus
according to claim 2,

25 wherein the change in the compression encoding process
via the video compression unit includes at least one of a change

in the compression ratio of pictures and a change in the video compression encoding details.

4. Video compression transmission apparatus
5 according to claim 3,

wherein the change in the video compression encoding process includes at least one of a change in the motion vector exploration method and a change in the type of filters applied to pictures and presence/absence of filters.

10 5. Video compression transmission apparatus
according to claim 2,

wherein the change in the transmission process via the video transmission unit includes a change in the type and
15 bandwidth of the communication line.

6. Video compression transmission apparatus
according to claim 2,

wherein the controller changes at least one of the
20 compression encoding process via the video compression unit and the transmission process via the video transmission unit depending on a set conditions for a video signal to be compression-encoded.

25 7. Video compression transmission apparatus

according to claim 6,

wherein the set conditions include the allowable range of at least one of the transmission rate, required transmission time and picture quality.

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8. Video compression transmission apparatus according to claim 6, further comprising:

a processing time measuring unit for measuring the compression encoding time via the video compression unit and the transmission time via the video transmission unit,

wherein the controller changes at least one of the compression encoding process via the video compression unit and the transmission process via the video transmission unit depending on the set conditions and the output of the processing time measuring unit.

9. Video compression transmission apparatus according to claim 2, further comprising:

a video input unit through which a digital video signal input to the video compression transmission is obtained,

wherein the controller controls the operation of the video input unit.

10. Video compression transmission apparatus according to claim 9,

wherein the video input unit includes a video storage unit for storing in advance a digital video signal to be compressed and transmitted.

5 11. Video compression transmission apparatus according to claim 9,

 wherein the video input unit comprises a video apparatus controller for supplying a digital video signal from external video apparatus to the video compression unit as required at
10 a speed equal to or greater than the speed required for the compression encoding via the video compression unit.

11. A video compression transmission method for compressing a digital video signal and transmitting the resulting signal, comprising:
15

 a video compression step of performing compression encoding on an input digital video signal; and

 a video transmission step of transmitting to outside the signal compression-encoded by the video compression unit via
20 a communication line,

 wherein the video compression step and the video transmission step are operated in parallel.

13. A video compression transmission method according
25 to claim 12,

wherein at least one of a compression encoding method via the video compression step and a transmission method via the video transmission step can be changed.

5 14. A video compression transmission method according to claim 13,

 wherein a change in the compression encoding method via the video compression step includes at least one of a change in the compression ratio of pictures and a change in the video
10 compression encoding details.

 15. A video compression transmission method according to claim 14,

 wherein the change in the video compression encoding
15 includes at least one of a change in the motion vector exploration process and a change in the type of filters applied to pictures and presence/absence of filters.

 16. A video compression transmission method according
20 to any one of claim 13,

 wherein the change in the transmission process via the video transmission step includes a change in the type and bandwidth of the communication line.

25 17. A video compression transmission method according

to any one of claim 13,

wherein the controller changes at least one of the
compression encoding process via the video compression step
and the transmission process via the video transmission step
5 depending on the set conditions for a video signal to be
compression-encoded.

18. A video compression transmission method according
to claim 17,

10 wherein the set conditions include the allowable range
of at least one of the transmission rate, required transmission
time and picture quality.

19. A video compression transmission method according
15 to claim 17, further comprising:

a processing time measuring step of measuring the
compression encoding time via the video compression step and
the transmission time via the video transmission step,

20 wherein at least one of the compression encoding process
via the video compression step and the transmission method via
the video transmission unit depending on the set conditions
and the output of the processing time measuring step.

20. A video compression transmission method according
25 to any one of claim 13, further comprising:

a video input step through which a digital video signal input to the video compression transmission is obtained.

21. A video compression transmission method according
5 to claim 20,

wherein the video input step includes a video storage step of storing in advance a digital video signal to be compressed and transmitted.

10 22. A video compression transmission method according to claim 20,

wherein the video input step includes a step of supplying a digital video signal from external video apparatus to the video compression unit as required at a speed equal to or greater
15 than the speed required for the compression encoding via the video compression unit.